MASTER

G0 Post-Holiday Safety Checklist

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Jlab

Overview: The safety checklist traditionally includes both safety items as well as those actions and checks which should be completed before the hall is closed in order to avoid unnecessary controlled accesses later on. In this document, personnel and/or equipment safety items are denoted in boldface.

Assumptions: A break in the schedule of at least four days has occurred, such as we expect between the Spring and Summer running of 2006. All target options are to be available: LH2/LD2, empty, solid, halo, and no target. The magnet is running at full current. The LH2/LD2 target was warmed up at the start of the break in the schedule and now needs to be re-condensed.

Signers: The only people authorized to initial this document are those whose initials appear next to each line item, or their designate. The initials are RE (Rolf Ent), PB (Paul Brindza), MS (Mike Seely), GS (Greg Smith), BV (Bill Vulcan), DG (Dave Gaskell).

Master Plan:

Post-Holiday (RE):

- ☑ (RE) RE **Magnet ready for beam** checklist (1) completed
- ☑ (RE) RE **Magnet ready to be energized** checklist (2) completed
- ☑ (RE) RE **LH2/LD2 Target** checklist (3) completed
- ☑ (RE) RE **Beamline** checklist (4) completed

G0 Post-Holiday Safety Checklist:

1. **Magnet ready for beam (PB/BV):**
   - 1.1. ☐ (PB) SL Magnet vacuum < 10^{-5} Torr
   - 1.2. ☐ (PB) SL LN2 bayonet vacuum good (~few mTorr) 85.66mT
   - 1.3. ☐ (PB) SL Lexan exit window covers off
   - 1.4. ☐ (BV) BV Control system on and OK
   - 1.5. ☐ (BV) BV Logger on
   - **1.6.** ☐ (PB) SL Turbopump on

2. **Magnet ready to be energized (PB/BV):**
   - 2.1. ☐ (PB) SL Cryogenics verified & stable . LN2 Flow meter Bad.
   - 2.2. ☐ (PB) SL Sweep for magnetic items near magnet
   - 2.3. ☐ (BV) BV Power Supply (PS) on, in remote
   - 2.4. ☐ (BV) BV B-field beacon working and sign posted
   - 2.5. ☐ (BV) BV Signage posted where B > 5G

3. **LH2/LD2 Target (assumes target was warmed up & needs to be cooled down) (MS):**
   - 3.1. ☑ (GS) GS Helium manifold bottles ~full
   - 3.2. ☑ (GS) GS H2 bottle has at least 500 psi
   - 3.3. ☑ (GS) GS Lock ballast tank valves: MV28 open and either; MV40, MV8 & MV57 open and MV77 closed (H2) or MV40 &MV57 closed and MV77 & MV78 open (D2).
   - 3.4. ☑ (GS) GS Target position out-of-beam and flyswatter out
   - 3.5. ☑ (GS) GS Target logging started
   - 3.6. ☑ (GS) GS Control system up
   - 3.7. ☑ (GS) GS Transfer line insulating vacuum checked and pumped if needed
   - 3.8. ☑ (GS) GS Check that the He relief MV29 is locked open
   - 3.9. ☑ (GS) GS Verify that N5OR alarm is active as specified in the G0 target **OSP**

3.10. ☑ (GS)  Verify that PV12 is open and MV12 is closed

G0 Post-Holiday Safety Checklist (continued):

4. **Beamline (BV,DG,PB):**
   - 4.1. ☑ (DG) DG SMS/FW electrically isolated
   - 4.2. ☑ (DG) DG SMS/FW positions locked
   - 4.3. ☐ (PB) ~10^{-8} T Girder/beamline pumps OK VBV3HG0A (closed)
   - 4.4. ☑ (BV) BV Raster on
   - 4.5. ☑ (BV) BV Dump diffuser LCW OK
   - 4.6. ☑ (DG) DG Beamline area free of junk that could get activated
   - 4.7. ☐ (PB) SL A-can pump on
   - 4.8. ☐ (PB) 8.3×10^{-7} T A-can vacuum OK
   - 4.9. ☑ (DG) DG Moller target out and collimators retracted

5. **Checklist submitted:**
   - 5.1. ☑ (RE) RE Copy of completed G0 Post-Holiday Safety Checklist given to Division Safety Officer